REF DES.	CONMED P/N	DESCRIPTION
N/A	**61-5710-XXX**	**HYFRECATOR 2000 ASSEMBLY**
A1	61-5741-001	ASSY.,PWB, DISPLAY,A1
A2	61-5744-100	ASSY,PWR PWB, A2 100V HYF 2000
A2	61-5744-115	ASSY,PWR PWB, A2 115V HYF 2000
A2	61-5744-220	ASSY,PWR PWB, A2 220V HYF 2000
A2	61-5744-230	ASSY,PWR PWB, A2 230V HYF 2000
N/A	24466-10	SWITCH CONTACT
N/A	61-5709-001	ASSY,CONNECTOR PLATE/SWITCH,A3
N/A	62-5642-001	SWITCH SLIDE PLATE, HYF 2000
N/A	62-5696-001	FRONT COVER,HYF 2000,SLKSCRN
N/A	62-5698-001	LED WINDOW HYFRE. 2000
N/A	62-5707-001	KNOB,ROTARY,GREY,.93"DIA x.73"
N/A	62-5708-001	SLIDE PLATE RETAINER, HYF 2000
N/A	62-5766-001	REAR COVER,HYF 2000,SLKSCRN
N/A	62-5767-001	LABEL,INSTRUCTIONS & WARNINGS (115V ONLY)
N/A	62-5779-001	CAP, VINYL
N/A	DI09-0608-F	SCREW,#6x1/2,TYPE B,PH,SELFTAP
N/A	DI09-0636-A	SCREW #6-32 x 2 1/4 PAN HEAD
N/A	DI16-0405-A20	SCREW, #4-20x5/16 PH,PLASTITE
A3	**61-5709-001**	**CONNECTOR PLATE ASSEMBLY**
A2P3	62-1389-003	CONNECTOR,4 PIN,.100
A2P4	62-3682-003	HOUSING CONN 0.156 LOK 3P
A3J1	62-2967-003	RECEPTACLE IEC SNAP-IN
A3J2	62-5712-001	RECEPTACLE 4 PIN PANEL MT
A3S1	62-5765-001	SWITCH PWR ROCKER HYFRE. 2000
N/A	62-3682-201	TERMINAL 18-24 2478
N/A	62-0436-002	WIRE STR 18AWG BRN
N/A	62-0433-012	WIRE STR 24AWG,YELLOW
N/A	62-0433-001	WIRE STR 24AWG BLU
N/A	62-0437-005	WIRE STR 16AWG GRN/YEL UL1007
N/A	62-0436-009	WIRE STR 18AWG WHT
N/A	62-0620-004	TUBE HS RNF100 TYPE1 3/16
N/A	62-0620-008	TUBING,HEATSHRINK,1/2" BLK
N/A	62-1388-001	TERMINAL CRIMP
N/A	62-0288-008	TERMINAL,SLP-ON,FEM,R,22-18AWG
N/A	62-0433-002	WIRE STR 24AWG BLK
N/A	62-0436-008	WIRE STR 18AWG BLK
N/A	62-0436-005	WIRE STR 18AWG BLU
N/A	62-5685-001	PLATE, CONNECTOR, HYF 2000
N/A	62-5706-001	DOME PLUG
N/A	62-0288-009	TERMINAL SLIP ON .110 RED
N/A	62-5712-002	SOCKET, CONTACT, 4 PIN RECEPT.
N/A	62-0433-007	WIRE STR 24AWG,RED

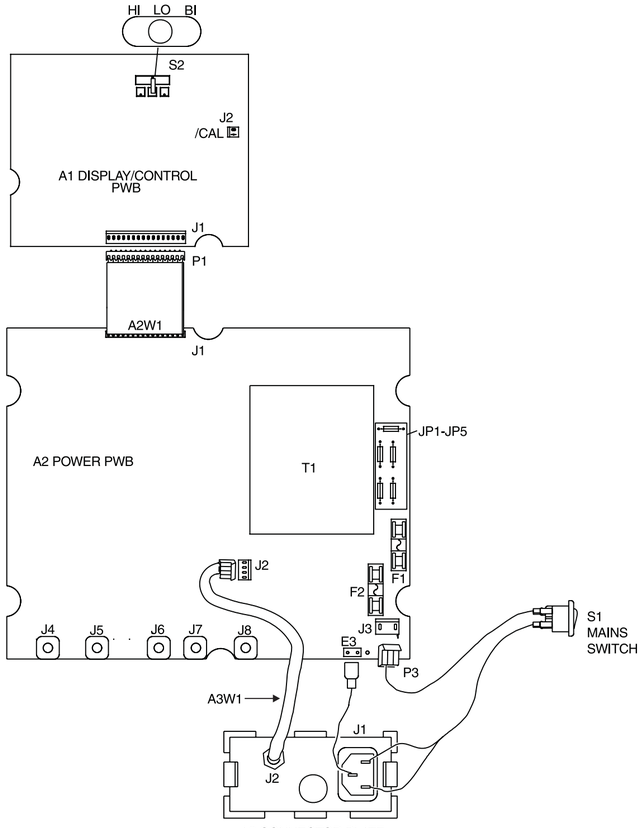
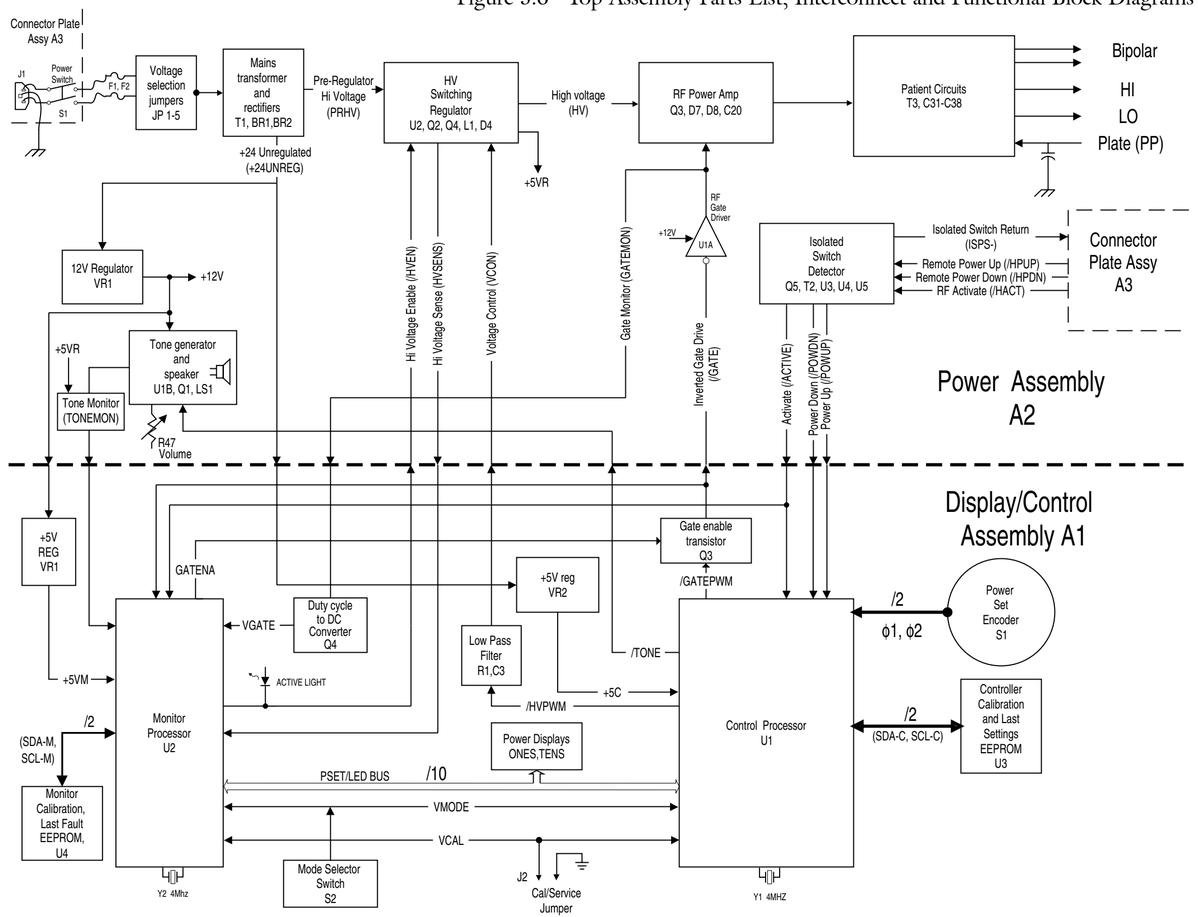


Figure 5.6 Top Assembly Parts List, Interconnect and Functional Block Diagrams



REE DES.	CONMED P/N	DESCRIPTION
C1,3,7,8,10, 12-16,18,19, 21,22	62-0267-002	CAP, 0.10 uF 50V 20% CERAMIC
C17	62-0267-004	CAP, 100pF DIP CER 50V
C2,4,5,6,9, 11,20	62-0267-001	CAP, 0.01uF, 50V, 20% CER
C23	62-1677-006	CAP,METPE.022UF 63V 10%
FOR VR2	62-0343-001	NUT KEPS 4-40
FOR VR2	62-3608-004	SCREW 4-40X5/16 PN HD PHL
J1	62-2845-015	RECEPTACLE STRAIGHT 16PIN
J2	62-3402-001	RECEPTACLE 9-PIN
Q1,2,3	62-4239-001	TRANSISTOR, NPN, 2N3904
*Q4	010630001	TRANSISTOR,FET, 2N7000
R1,6,8,9	62-0364-063	RES, 1K 1/4W 5% CF
R10	62-0364-074	RES, 3K, 1/4W, 5%
R11	62-0364-111	RES, 100K, 1/4W, 5%
R12	62-0364-067	RES, 1.5K, 1/4W, 5%
R13	62-0364-051	RES, 330, 1/4W, 5%
R14,15	62-0364-070	RES, 2K, 1/4W, 5% CF
R2,3,4	62-0364-080	RES, 5.1K, 1/4W, 5%
R5	62-0961-255	RESISTOR 4.42K
R7	62-0364-046	RES, 200, 1/4W, 5% CF
RN1	62-3463-001	RES,NETWORK 16 DIP 150 OHM
RN2,3,4	62-3463-008	RESISTOR NETWORK DIP 10K 2%
*S1	62-4920-001	SWITCH,ROTARY ENCODER 2-BIT
TP1-5	020361101	TEST POINTS
*U1	61-5714-001	IC CONTROL,PROGRAMMED,HYF 2000
*U2	61-5716-001	IC MONITOR,PROGRAMMED,HYF 2000
*U4,3	62-3466-005	IC EEPROM 24LCO1B,MICROCHIP
VR1	62-1719-001	REGULATOR VOLT 5V LM340LAZ-5.0
VR2	010287001	I.C.REGULATOR,5VDC,2%,LM340AT5
X1,2	010652001	LED DISPLAY HP HDCP-4603
X3	62-4946-002	LED BLUE LM934MBC KINGBRIGHT
X3	62-5396-001	MOUNT, L.E.D.
Y1-2	62-5158-001	RESONATOR PIEZO 4MHZ CST4.00MGW

*RECOMMENDED SPARES

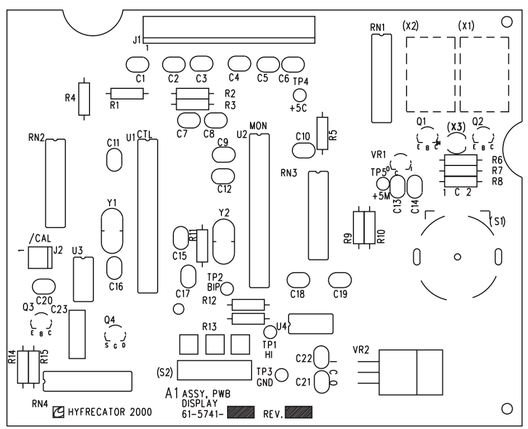
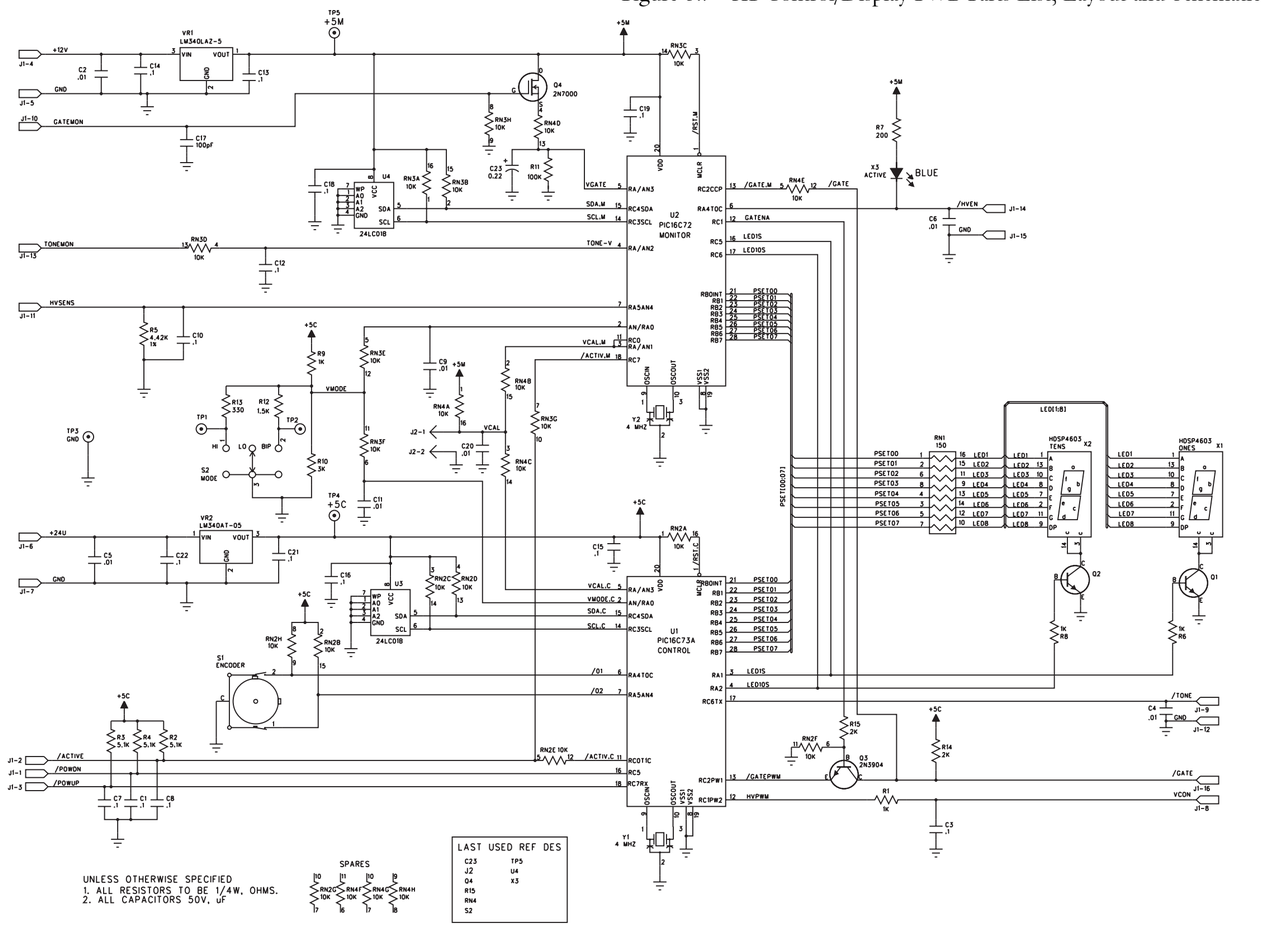


Figure 5.7 A1 Control/Display PWB Parts List, Layout and Schematic



REE DES.	CONMED P/N	DESCRIPTION
BR1-2	62-0258-006	BRIDGE RECTIFIER 400V, 1.5A, WO4G
C1,10,21, 22,23	62-0267-001	CAP, 0.01uF, 50V, 20% CER
C12,18	62-4799-001	CAP.,ELECT.,100uF,100V LOW ESR
C13	62-5191-001	CAP., ELECT, 680uF 200V
C14	62-5188-001	CAP., ELECT. 1000uF, 35V
C19	62-1677-011	CAP, .1uF 250V 10% PE
C2,3,4,6,8, 9,11,15,16, 26,27,28	62-0267-002	CAP, 0.10 uF 50V 20% CERAMIC
C20	62-1676-004	CAP., POLYPROP, 2KV, .0033uF
C24,30	62-0268-001	CAP, 10uF, 16V 20% ELECT.
C25	62-3575-007	CAP, MET, .033MFD, 50V 5%
C29	62-5686-474	CAP .47 uF 63V
C31,38	62-5404-004	CAP,CER.,1KV, 2200pF +/- 20%
C32	62-5404-002	CAP,CER., 2KV, 1000pF +/- 20%
C33,34	62-5404-003	CAP,CER., 1KV, 3300pF +/- 20%
C36,37	62-1677-010	CAP., MPE 0.047uF, 630V, 10%
C5	62-5404-005	CAP,CER., 1KV, 560pF +/- 20%
C7	62-3575-002	CAP, MET, .01MFD, 50V, 5%
D1,2,3,6,9	62-0289-001	DIODE SIGNAL 1N4148
D4	62-5190-001	DIODE, 50NS, 200V, 1A
D5	62-0292-005	DIODE,ZENER,500mW,6.8V, 5%, 1N5235B
*D7,8	62-1683-001	DIODE, 4A 1000V
DS1	62-4056-001	LED, RED
E1,2	62-5774-001	TERMINAL, CRIMP, 18-24 AWG
E3	62-0286-002	TERMINAL SLIPON MALE 0.25"
F1-2	62-0295-002	FUSE CLIP 5mm
F1,F2	62-3926-015	FUSE,1.25A,TIME DELAY,5 X 20 (-100,-115)
F1,F2	62-3926-113	FUSE, 630mA,TIME DELAY,5 X 20 (-220,-230)
FOR Q3 & Q4	62-0343-001	NUT KEPS 4-40
FOR Q4	62-3608-004	SCREW 4-40X5/16 PN HD PHL
FOR Q3	62-3608-006	SCREW,4-407/16 PN HD PHL
J1	62-5196-001	RIBBON CABLE\CONN,HYF 2000
J2	62-2845-003	RECEPTACLE 0.1" 4 PIN MALE MOLEX
J3	62-3598-004	HEADER, STR. PIN, 3 CKT, TIN MOLEX
J4,5,6,7	24466-29	SOCKET, HYFRECATOR
J8	62-5694-001	POST ARM CONTACT PLATED
JP1,2,4	62-3062-001	RES,ZERO OHM (-100,-115)
JP3,5	62-3062-001	RES,ZERO OHM (-220)
JP2,5	62-3062-001	RES,ZERO OHM (-230)
L1	62-5193-001	INDUCTOR, 1000uH, +/-15%
LS1	62-5405-001	TRANSDUCER, AUDIO, AT-202, PROJECTS UNLTD.
N/A	62-0260-001	CABLE TIE .085 WIDE
N/A	62-0622-002	WIRE HI VOLTAGE #22 10KV
N/A	62-1539-002	HS TUBING, ADHESIVE LINED
N/A	62-4240-001	STANDOFF, NYLON WIRE 1"
N/A	62-4842-002	TAPE, FOAM 5/8" x 5/8" DOUBLE SIDED
Q1	62-4239-002	TRANSISTOR NPN 2N4401
*Q2	62-5194-001	POWER MOSFET, 200V, 1.5 OHM, IRF610
*Q3	62-5197-001	PWR MOSFET,N-CHAN,2.0 OHM,900V
*Q4	62-5195-001	PWR MOSFET,P-CHAN,1.5 OHM,200V, IRF9620
Q5	62-4239-001	TRANSISTOR, 2N3904
R1	62-0364-063	RES, 1K 1/4W 5% CF
R11	62-0364-019	RES, 15, 1/4W, 5%
R14	62-0364-062	RES, 910, 1/4W, 5%
R15	62-4609-001	RES, 51K 2W, 5%
R17,19	62-0961-193	RES, 1K, 1/4W, 1%
R2,13	62-0364-135	RES, 1.0M, 1/4W, 5% CF
R20	62-0961-197	RES, MF, 1.10K 1/4W 1%
R21,22,29	62-0364-075	RES, 3300, 1/4W, 5% CF

REE DES.	CONMED P/N	DESCRIPTION
R23	62-0364-012	RES, 7.5, 1/4, 5%
R31	62-0961-263	RES, MF, 5.36K 1/4W 1%
R33,34	62-0961-385	RES, 100K, 1/4W, 1%
R36	62-0364-054	RES, 430, 1/4W, 5%
R37	62-1693-006	RES FLAMPRF,5.1K,3W,5%
R38	62-0364-066	RES, 1.3K 1/4W 5%
R40,44,46	62-0364-045	RES, 180, 1/4W,5%
R41,43,45	62-0364-039	RES, 100 1/4W 5% CF
R42	62-0961-289	RES, MF, 10.0K, 1/4W, 1%
R47	BI17-502T640	POTENTIOMETER, 5K, BOURNS
R6,30,32,39	62-0364-057	RES, 560 1/4W 5%
R7	62-0364-098	RES,30K,1/4W, 5%
R8,27	62-0364-103	RES, 47K, 1/4W, 5%
R9,12,16	62-0364-111	RES, 100K, 1/4W, 5%
T1	62-5753-002	TRANSFORMER, LINE, HYF 2000
T2	62-5407-001	TRANSFORMER,HDSWITCH,HYF 2000
T3	62-5756-001	TRANSFORMER, OUTPUT, HYF 2000
TP1-6	020361101	TEST POINTS
U1	010561001	IC,FET DRIVER
U2	62-5203-001	I.C.,PULSE WIDTH MODULATION, TL494
*U3-5	62-4238-001	IC, OPTOISOLATOR OPI1264A
*VR1	62-0417-005	REGULATOR VOLTAGE 12V, 7812
XQ3, XQ4	040440002	HEAT SINK
XVR1	62-5406-001	HEATSINK TO-220

*RECOMMENDED SPARES

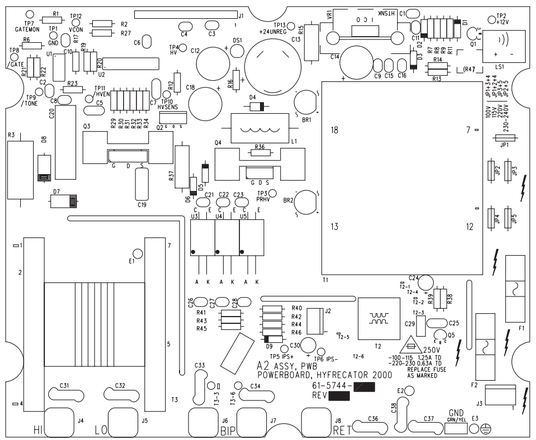


Figure 5.8 A2 Power PWB Parts List, Layout and Schematic